**1.3 Government Intervention**

*Calculating the Effects of Indirect Taxes*

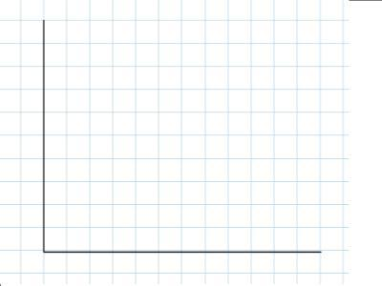
**Introduction:** Assume the market for petrol is represented by the demand and supply equations below (quantity is in litres, price is in dollars):

**Qd = 10 - 0.4P Qs = -2+2P**

1. Calculate the equilibrium price and quantity of petrol.

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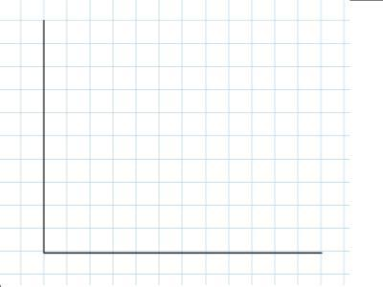
1. On the graph below, illustrate the market for petrol in equilibrium assuming no government intervention.



1. Assume the government places a $3 tax on each litre of petrol bought and sold. Determine the new supply equation for petrol.

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1. On the graph below, show the effect of the $3 tax on petrol.



1. Calculate the new equilibrium price consumers will pay for petrol.

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1. Calculate the new price producers will get to keep after paying the $3 tax to the government.

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1. Calculate the new equilibrium quantity of petrol sold following the $3 tax.

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1. On the graph you drew for #11, shade the area of consumer tax burden one color and the area of producer tax burden another color. Explain what these areas represent.

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1. Who appears to bear the greater burden of the petrol tax, producers or consumers? Why do you think this is the case?

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1. Calculate the following:
   1. The amount of tax paid by petrol consumers:

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* 1. The amount of tax paid by petrol producers:

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* 1. The total tax revenue generated by the petrol tax:

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1. Why are petrol taxes so widely used in Europe as an important source of tax revenue for governments?

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